Attorney Docket No.: VRT0098US

WHAT IS CLAIMED IS:

1. A method of performing cascaded replication comprising:

replicating data to be written to a data volume of a first node to a data volume of a second node; and

replicating data to be written to said data volume of said second node to a data volume of a third node, wherein,

at least one of said replicating data to be written to said data volume of said first node to said data volume of said second node and said replicating data to be written to said data volume of said second node to said data volume of said third node comprises asynchronously replicating data.

- 2. The method of claim 1, wherein said replicating data to be written to said data volume of said first node comprises asynchronously replicating said data to be written to said data volume of said first node to said data volume of said second node.
- 3. The method of claim 2, wherein said replicating data to be written to said data volume of said second node comprises asynchronously replicating said data to be written to said data volume of said second node to said data volume of said third node.
- 4. The method of claim 2, wherein said replicating data to be written to said data volume of said second node comprises periodically replicating said data to be written to said data volume of said second node to said data volume of said third node.
- 5. The method of claim 2, wherein,
 - said replicating data to be written to said data volume of said first node comprises,
 - replicating data to be written to a data volume of a primary node to a data volume of an intermediate node; and
 - said replicating data to be written to said data volume of said second node comprises,
 - replicating data to be written to said data volume of said intermediate node to a data volume of a secondary node.

- 6. The method of claim 5, wherein said replicating data to be written to said data volume of said intermediate node comprises replicating data to be written to said data volume of said intermediate node to a data volume of each of a plurality of secondary nodes
- 7. The method of claim 2, wherein,
 - said replicating data to be written to said data volume of said first node comprises replicating data to be written to said data volume of said first node to said data volume of said second node using a first data link coupled between said first node and said second node;
 - said replicating data to be written to said data volume of said second node comprises replicating data to be written to said data volume of said second node to said data volume of said third node using a second data link coupled between said second node and said third node; and said first data link has a higher bandwidth than said second data link.
- An apparatus configured to perform cascaded replication comprising: means for replicating data to be written to a data volume of a first node to a data volume of a second node; and
 - means for replicating data to be written to said data volume of said second node to a data volume of a third node, wherein,
 - at least one of said means for replicating data to be written to said data volume of said first node to said data volume of said second node and said means for replicating data to be written to said data volume of said second node to said data volume of said third node comprises means for asynchronously replicating data.
- 9. The apparatus of claim 8, wherein said means for replicating data to be written to a data volume of a first node comprises means for asynchronously replicating said data to be written to said data volume of said first node to said data volume of said second node.

- 10. The apparatus of claim 9, wherein said means for replicating data to be written to said data volume of said second node comprises means for asynchronously replicating said data to be written to said data volume of said second node to said data volume of said third node.
- 11. The apparatus of claim 9, wherein said means for replicating data to be written to said data volume of said second node comprises means for periodically replicating said data to be written to said data volume of said second node to said data volume of said third node.
- 12. The apparatus of claim 9, wherein,
 - said means for replicating data to be written to said data volume of said first node comprises.
 - means for replicating data to be written to a data volume of a primary node to a data volume of an intermediate node; and
 - said means for replicating data to be written to said data volume of said second node comprises,
 - means for replicating data to be written to said data volume of said intermediate node to a data volume of a secondary node.
- 13. The apparatus of claim 12, wherein said means for replicating data to be written to said data volume of said intermediate node comprises means for replicating data to be written to said data volume of said intermediate node to a data volume of each of a plurality of secondary nodes.
- 14. The apparatus of claim 9, wherein,
 - said means for replicating data to be written to said data volume of said first node comprises means for replicating data to be written to said data volume of said first node to said data volume of said second node using a first data link coupled between said first node and said second node;
 - said means for replicating data to be written to said data volume of said second node comprises means for replicating data to be written to said data volume of said second node to said data volume of said third node

using a second data link coupled between said second node and said third node; and

said first data link has a higher bandwidth than said second data link.

15. A machine-readable medium having a plurality of instructions executable by a machine embodied therein, wherein said plurality of instructions when executed cause said machine to perform a method comprising:

replicating data to be written to a data volume of a first node to a data volume of a second node; and

replicating data to be written to said data volume of said second node to a data volume of a third node, wherein,

at least one of said replicating data to be written to said data volume of said first node to said data volume of said second node and said replicating data to be written to said data volume of said second node to said data volume of said third node comprises asynchronously replicating data.

- 16. The machine-readable medium of claim 15, wherein said replicating data to be written to a data volume of a first node comprises asynchronously replicating said data to be written to said data volume of said first node to said data volume of said second node.
- 17. The machine-readable medium of claim 16, wherein said replicating data to be written to said data volume of said second node comprises asynchronously replicating said data to be written to said data volume of said second node to said data volume of said third node.
- 18. The machine-readable medium of claim 16, wherein said replicating data to be written to said data volume of said second node comprises periodically replicating said data to be written to said data volume of said second node to said data volume of said third node.

 The machine-readable medium of claim 16, wherein, said replicating data to be written to said data volume of said first node comprises.

> replicating data to be written to a data volume of a primary node to a data volume of an intermediate node; and

said replicating data to be written to said data volume of said second node comprises,

replicating data to be written to said data volume of said intermediate node to a data volume of a secondary node.

- 20. The machine-readable medium of claim 19, wherein said replicating data to be written to said data volume of said intermediate node comprises replicating data to be written to said data volume of said intermediate node to a data volume of each of a plurality of secondary nodes.
- 21. The machine-readable medium of claim 16, wherein, said replicating data to be written to said data volume of said first node comprises replicating data to be written to said data volume of said first node to said data volume of said second node using a first data link coupled between said first node and said second node;
 - said replicating data to be written to said data volume of said second node comprises replicating data to be written to said data volume of said second node to said data volume of said third node using a second data link coupled between said second node and said third node; and said first data link has a higher bandwidth than said second data link.
- A data processing system comprising:
 - a log to store data to be written to at least one of a data volume of a first node and a data volume of a second node; and
 - a replication facility configured to replicate data to be written to said data

 volume of said first node to said data volume of said second node and

 to replicate data to be written to said data volume of said second node

 to a data volume of a third node using said log, wherein,

- said replication facility comprises a replication facility configured to
 asynchronously replicate at least one of said data to be written
 to said data volume of said first node and said data to be written
 to said data volume of said second node.
- 23. The data processing system of claim 22, wherein said replication facility further comprises,
 - a replication facility configured to asynchronously replicate said data to be written to said data volume of said first node to said data volume of said second node.
- 24. The data processing system of claim 23, wherein said replication facility further comprises,
 - a replication facility configured to asynchronously replicate said data to be written to said data volume of said second node to said data volume of said third node
- 25. The data processing system of claim 23, wherein said replication facility further comprises,
 - a replication facility configured to periodically replicate said data to be written to said data volume of said second node to said data volume of said third node.